

Г.Р. ЕРЕМЕЕВА,

*кандидат педагогических наук, доцент
Казанский федеральный университет*

Е.С. УЛЬЯНОВА,

*магистрант
Казанский федеральный университет*

Ф.С. ХАКИМЗЯНОВ,

*доктор филологических наук, профессор
Афйонский университет Коджатеке (Турция)*

BILINGUAL EDUCATION USING INFORMATION TECHNOLOGIES

Аннотация. Данная статья посвящена вопросам билингвального обучения с применением информационных технологий. Дано определение билингвального обучения. В статье приводятся плюсы и минусы обучения на билингвальной основе. В статье представлены результаты проведения урока на билингвальной основе.

Ключевые слова: билингвальное обучение, английский язык, информационные технологии, урок, лингвистический, предмет, обучающийся.

Abstract. This article is devoted to bilingual education using information technologies. The definition of bilingual education is given. The article outlines the pros and cons of bilingual education. The article presents the results of a lesson on a bilingual basis.

Key words: bilingual education, the English language, information technology, linguistic, content, learning, lesson, student.

Knowledge of a foreign language is now becoming a key component of the educated person. In some schools this fact is taken into account: learning of specific subjects is conducted in two languages.

In some countries, such as Russia, Japan, China bilingual education is one of the most important tools that contribute to the unification of national systems of education into the world educational space. In some other countries (Australia, USA, France, Belgium) bilingual education is a need to resolve problems of adaptation and learning of students-immigrants.

According to A.G. Width, bilingual education supposes a teacher and students' mutual activities in the process of studying separate subjects or subject areas by means of native and foreign languages. It provides a high-level

proficiency in a foreign language knowledge, mastering the content of the subject, professional, intercultural and language competences [3, p. 15].

Advantages of bilingual education are the following. Firstly, awareness of cultural diversity, ethno-linguistic identity, introduction to the national values. Such training promotes communication, the unity of ethno-linguistic groups, additional linguistic knowledge. During bilingual education interaction, interpenetration, awareness of general and specific features of different language cultures are achieved. Creative thinking is formed in close connection with a language. Bilingualism, which is based on comparison and synthesis, helps to understand a particular culture adequately. As a result, it removes the inter-ethnic contradictions [1].

There are lots of experiences of bilingual education application in various educational institutions in many cities of Russia: Moscow, Penza, Kazan, St. Petersburg, Kostroma, Veliky Novgorod, Kaliningrad, Saratov. But not in all cities bilingual education is based on the approved state educational programs. In many cases it is taught in the form of experimental lessons.

For example, some schools in Kazan practice bilingual education. Thus, in Lyceum-boarding school No.7, Lyceum-boarding school No. 2, Gymnasium-boarding school No. 4 teaching of some subjects (mathematics, computer science, biology, chemistry, physics) is conducted both in English and Russian languages.

We can also cite the example of the introduction of the optional training course "Mathematics in English" at the faculty of Fundamental Sciences, Moscow State Technical University named after N.Uh. Bauman [2]. The course shows high importance of English in technical professions and students' high motivation to this kind of education. Learning math in English can increase professional and cultural importance of any student. They can easily acquire math terminology in English, which will be useful when using any computer program.

From our point of view, a low level of English language knowledge can be the only downside of bilingual education. This may cause the loss of interest in a foreign language and mathematics as well.

Now we would like to share our own experience in conducting an experiment on bilingual education. During a lesson of mathematics at school we offered an unusual approach to the explanation of the material in English and Russian languages. We have chosen a group of students from high school, because they have intermediate high level of English language knowledge compared to those at middle school, with the interme-

diate medium level. We discussed the topic of fractions that students had already passed, and offered them to review the subject again, but only in English, using information technology. During the explanation of the material definitions in English (yet without duplication in Russian) and formulas were appearing on the screen simultaneously with the teacher's words. During a half of the lesson the teacher was explaining the subject in English only, using mathematical formulas and tables presented on the screen. During the second half of the lesson there was duplication of the same definitions and terms, but only in Russian. At this lesson approximately 50% of the students understood the teacher's explanation both in Russian and English. Another 50% of the students tried to understand phrases and terms in English using their knowledge on the subject. This suggests that if there is at least a minimum knowledge in English and good one in mathematics it becomes possible to understand English definitions of mathematical expressions for almost every student. If there is no basic knowledge of neither English nor Math the understanding of the subject would be virtually impossible.

Based on the results of the lesson on a bilingual basis, we concluded:

- 1) English is a world language that each student should know;
- 2) Information technologies and multimedia used in the process of education can significantly enhance the interest and understanding of the subject;
- 3) Each student becomes interested in something new especially if they have knowledge of the subject, as a result learning appears to be easy and clear;
- 4) It is necessary to know how to motivate students to content and language integrated learning, which in turn requires training of the teacher.

In conclusion, we would like to add that the practice of bilingual education is always different, but what unites such lessons is the necessity of teachers' professionalism on the subject and excellent knowledge of native and foreign languages. This gives students the opportunity to study not only technical subjects, but several foreign languages.

References

1. Halskova N.D., Koryakovtseva N.I., Mosnicka E.V., Nechaeva N.N. Training on a bilingual basis as a component of in-depth language education (Obucheniye na bilingvalnoy osnove kak component uglublennogo yazykovogo obrazovaniya)/N.D. Halskova, N.I. Koryakovtseva, E.V. Mosnicka, N.N. Nechaeva// Foreign languages at school. – 2003. – No. 12. – P. 12–6.

2. Krasnovsky E.E. Engineering journal. About the organization of teaching mathematics in English at the faculty of Fundamental Sciences, Moscow State Technical University named after N.Uh. Bauman (Inzhenernyy vestnik. Ob organizatsii prepodavaniya matematiki na angliyskom yazyke na facultete Fundamentalnyye nayki Moskovskiy gosudarstvennyy tekhnicheskiy universitet im. N. E. Baumana) / E.E. Krasnovsky. – Moscow, 2015. – 7 p.
3. Shirin A.G. Bilingual education in Russian and foreign pedagogy (v otechestvennoy izarubezhnoy pedagogike) / A.G. Shirin. – Veliky Novgorod, 2007. – 235 p.